A KEY TO THE STIPITATE POLYPORACEAE OF TEMPERATE NORTH AMERICA—I

BY WILLIAM A. MURRILL

KEY TO THE GENERA

Surface of hymenophore covered with reddish-brown varnish. Surface of hymenophore not as above.	A. GANODERMA
Tubes hexagonal and radially elongated.	B. Hexagona
Tubes not as above.	
Stipe compound.	C. GRIFOLA
Stipe simple.	
Context white.	
Plants fleshy, terrestrial.	D. SCUTIGER
Plants tough, epixylous.	
Pileus inverted, erumpent from lenticels.	
· •	E. Porodiscus
Pileus erect, not erumpent.	
Context homogeneous, firm.	F. POLYPORUS
Context duplex, spongy above, wood	y below.
	G. ABORTIPORUS
Context brown.	
Hymenium concentrically lamelloid.	H. Cycloporus
Hymenium poroid.	
Spores white.	I. ROMELLIA
Spores brown.	
Pileus erect, stipe central.	J. Coltricia
Pileus inverted, pendent.	K. COLTRICIELLA

A. THE STIPITATE SPECIES OF GANODERMA

Ι.	Context ochraceous to fulvous; plant perennial	on deciduous trees.
		G. flabelliforme (Scop.) Murrill
	Context pallid; plant annual on hemlock.	G. Tsugae Murrill

B. THE STIPITATE SPECIES OF HEXAGONA

I.	Surface glabrous to fibrillose, not distinctly hispid. 2
	Surface hispid; tubes small; context thin, translucent. II. floridana Murrill
2.	Pileus reniform at maturity ; stipe usually much reduced.
	Pileus flabelliform; stipe usually very distinct, equaling the pileus at times in
	length; tubes of medium size. II. daedalea (Link) Murrill
3.	Tubes large; surface of pilcus decorated with imbricated reddish-brown fibrils,
	which disappear with age. II. alveolaris (DC.) Murrill
	Tubes much smaller, the mouths rarely over 1 mm. long and 0.5 mm. broad ; sur-
	face of pileus glabrous. II. micropora Murril

C. THE SPECIES OF GRIFOLA

- I. Hymenium ochraceous, becoming dirty-yellow with age; plants terrestrial, irregularly confluent, olivaceous to greenish-yellow. G. poripes (Fr.) Murrill Hymenium white or pallid, sometimes becoming fuliginous, but never ochraceous.
- 2. Surface of pileus gray or grayish-brown to coffee-colored ; stipe intricately branched; lobes numerous and small.

Surface of pileus pallid or alutaceous ; stipe not intricately branched ; lobes usually few in number and comparatively large. 5

3. Pileoli centrally attached, circular and umbilicate.

G. ramosissima (Scop.) Murrill 4

Pileoli lateral, spatulate or dimidiate.

4. Hymenium white, not changing color; surface of pileus gray or grayish-brown. G. frondosa (Dicks.) S. F. Gray

Hymenium white, becoming fuliginous on drying or when bruised; surface of G. Sumstinei Murrill pileus coffee-colored.

5. Sporophore of immense size, 20-60 cm. in diameter; spores echinulate, $8-9\mu$. G. Berkeleyi (Fr.) Murrill

Sporophore 8 cm. or less in diameter; spores smooth, ovoid, much smaller. G. fractipes (B. & C.) Murrill

D. THE SPECIES OF SCUTIGER

т	Surface of pileus uneven, squamose or rugose. 2
	Surface of pileus smooth, tomentose or glabrous. 4
2.	Pileus sulfur-yellow, pleuropous; surface ornamented with imbricated floccose wart-like scales; context white or yellowish; tubes small, angular, decurrent, white, becoming greenish when wounded, yellowish when dry; spores $9 \times 6\mu$. S. Ellisii (Berk.) Murrill
	Pileus brown. 3
3.	Tubes large, 1.5 mm. or more in diameter, hexagonal; surface of pileus smoky-
Ŭ	brown ornamented with darker imbricated tufts of appressed hairs; context
	white; stipe excentric, its entire surface reticulate.
	S. retipes (Underw.) Murrill
	Tubes small, 0.5 mm. in diameter, polygonal, decurrent, white ; pileus reddish-
	: brown, rugose; stipe central, not reticulate. S. decurrens (Underw.) Murrill
4.	Pileus light-colored : white, yellow or blue. 5
	Pileus dark-colored : gray or brown. 7
5.	Pileus white; context white; tubes irregular, dissepiments thin, white; plants
	small, growing upon grass-roots; stipe short, dark-brown.
	S. eryptopus (Ell. & Barth.) Murrill
	Pileus yellow to orange, glabrous; stipe short, concolorous; tubes short, small,
	$I-2 \times 0.2 \text{ mm.}$, decurrent ; spores ovoid, hyaline, $4 \times 5^{-6} \mu$.
	S. laeticolor Murrill
	Pileus blue when fresh, changing to brown on drying. 6
6.	Tubes entire, becoming reddish-brown on drying; context ochraceous, and pileus
	and stipe reddish-brown in herbarium specimens.
	S. caeruleoporus (Peck) Murrill

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Tubes lacerate, fading to gravish-brown or dirty white; context nearly white; pileus and stipe dull smoky-brown when dry. S. holocyaneus (Atk.) Murrill

8

9

- 7. Stipe black and rooting. Stipe neither black nor rooting.
- S. Pileus smoky-brown, subtomentose ; margin thin, inflexed ; context white; tubes regular, polygonal, entire, 2 mm. long, 0.5 mm. in diameter; stipe cylindrical, light-brown above, black and rooting below; spores white, elliptical, $7 \times 5 \mu$. S. radicatus (Schw.) Murrill
 - Pileus drab-colored, nearly glabrous; margin thin, inflexed when young; context milk-white even when dry; tubes white, irregular, toothed, I mm. long, 0.25 mm. in diameter ; stipe short, sooty-black as far as the decurrent tubes, attached to buried wood ; spores white, $3-4 \times 5-7 \mu$. S. subradicatus Murrill
- 9. Pileus gray, glabrous or nearly so; margin very thin; context rosy-gray, soft, fleshy, thin when dry ; tubes small, 0.25-0.5 mm., unequal, decurrent ; stipe S. griseus (Peck) Murrill short, concolorous. 10

Pileus brown.

- 10. Stipe dark-purple, very thick ; pileus fulvous-brown, purplish at times, clothed with short tomentum, margin very obtuse; context reddish beneath the cuticle, ~ marked when dry with a black concentric line limiting growth ; tubes white, 2 S. persicinus (B. & C.) Murrill to a mm.
 - Stipe yellowish-brown, usually excentric; plants cespitose; pileus yellowishbrown, pruinose; margin thin; context rose-tinted when dry, dark-red next to the tubes, which are small, $I-3 \times 0.3$ mm., decurrent, rose-colored when dry, S. Whiteae Murrill the edges fimbriate.

A PALM FROM THE MID-CRETACEOUS *

BY EDWARD W. BERRY

The enormous number of existing palms, considerably over one thousand species, are about equally divided between the oriental and occidental tropics, with many monotypic genera, showing well the marked effects of geographical distribution and isolation on the formation of species. There are no outlying forms, the highest northern latitude reached being about 43° in Europe, and the highest southern latitude about 45° in New Zealand.

Lesquereux writing in 1878 † records fossil palms in 52° north latitude in both America and Europe. Since then remains have been described from as far north as 80° (Grinnell Land, Spitzbergen), and two fine species are recorded from the Tertiary

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[†] Tertiary Flora.